KRUBA team

Granite-Chan

Smart Tsundere AI Shopping Assistant & Navigator

IBM GRANITE HACKATHON

KRUBA team
23 Feb, 2024

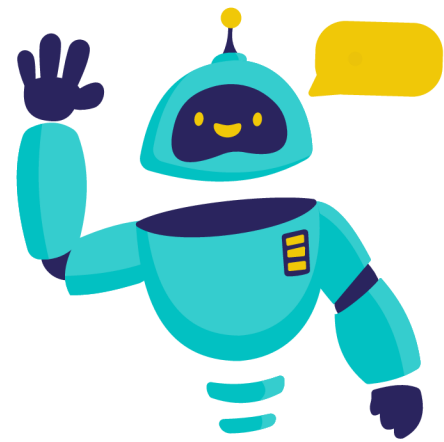https://github.com/FaRin
ZZZZ/granite-hack/

GET STARTED ⇨

- **first impression**
- **cosistency**
- **professional process**

Here's some interesting Researches

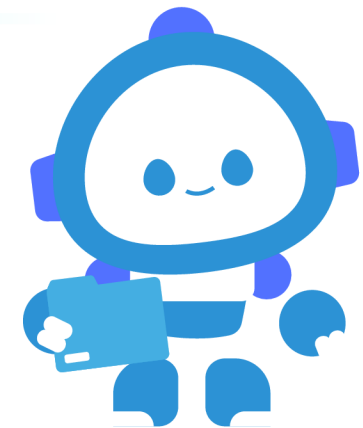. (Harvard Business Review, 2023)

41% **A Brand Mascots** increase customer engagement by

in-store sales Boosted by . (Retail AI Study, 2023) **15%**

for having an **AI-driven** system

- Brand mascots increase customer engagement by 41%. (Harvard Business Review, 2023)
- AI-powered personalization increases in-store sales by up to 15%. (Retail AI Study, 2023)
- Physical stores that create experiential shopping see a 20% boost in foot traffic. (McKinsey, 2023)
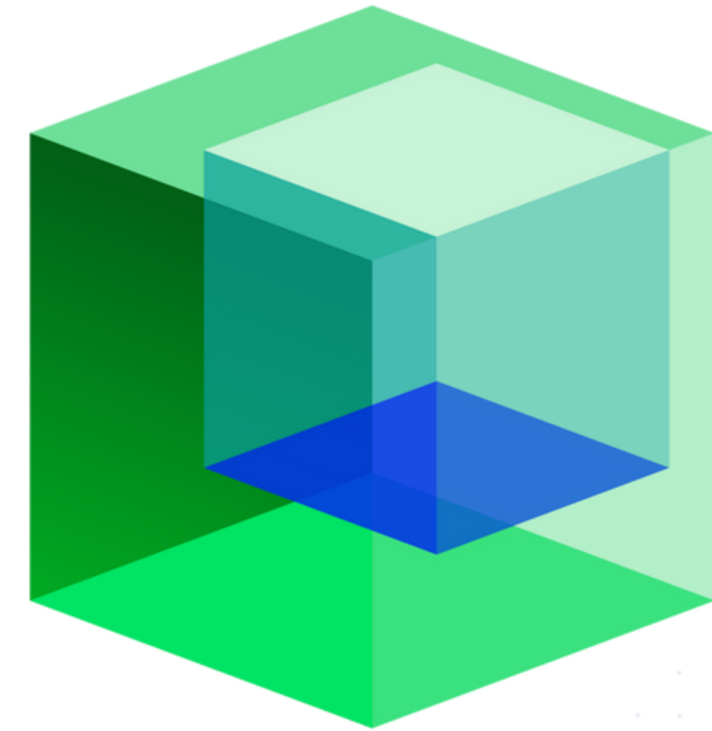
MEET
" Granite-Chan "

IBM Granite's

Advanced RAG

with Voice Integration

IBM Granite's

Advanced RAG
with Voice Integration

AI–Powered Navigation

Adaptive Promotions

Personality Modes
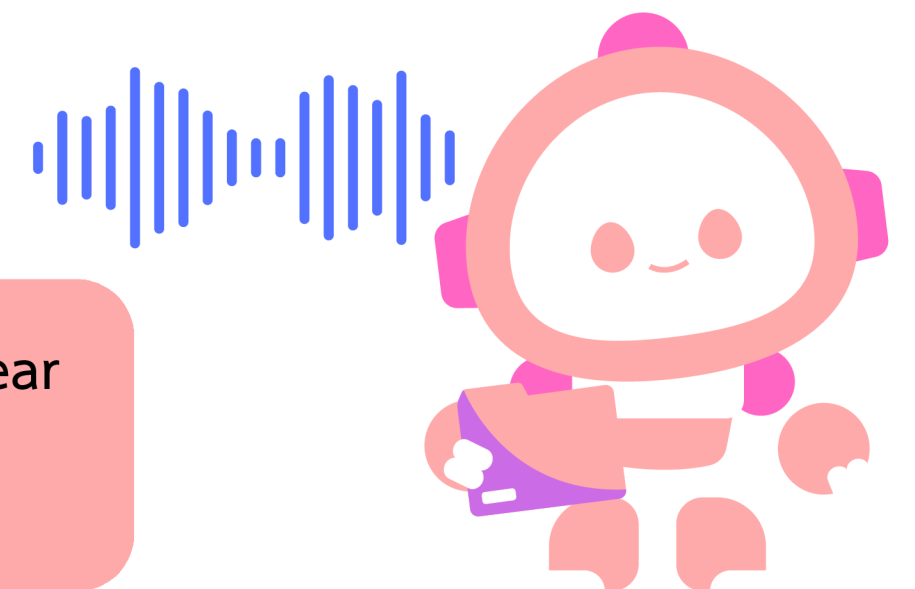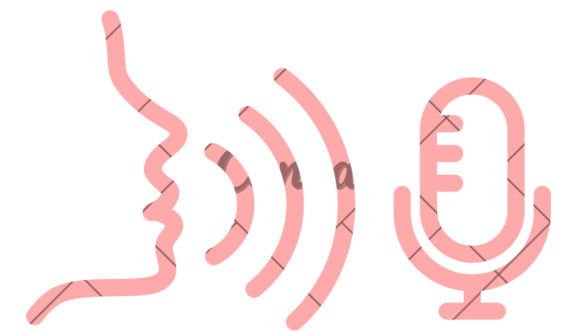
INTERACTION
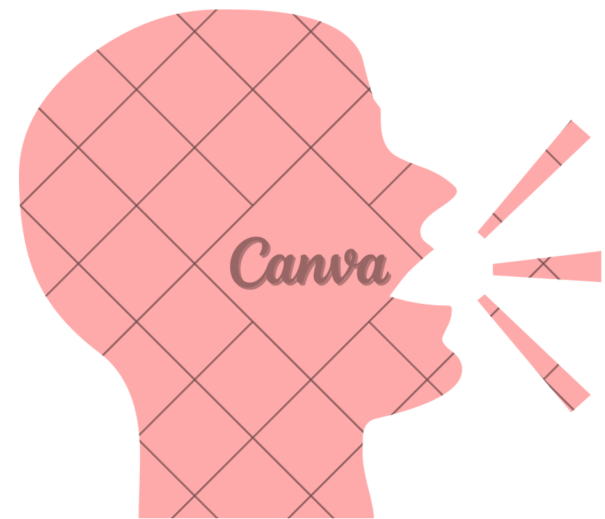
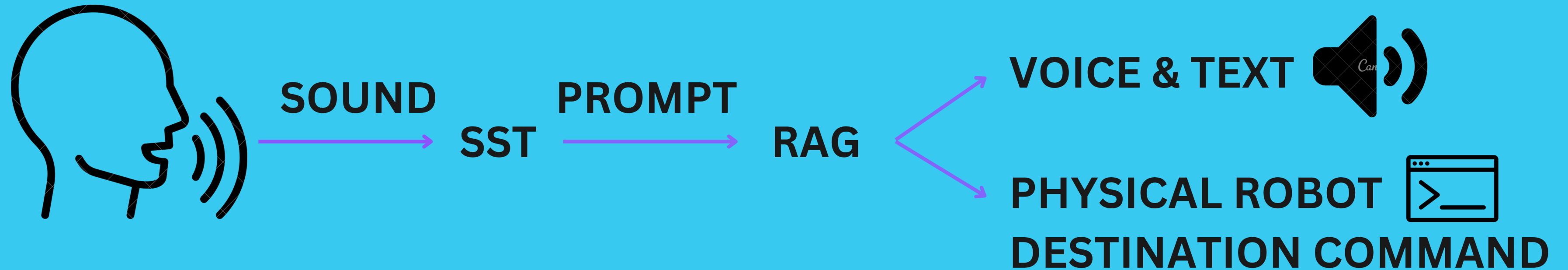"Hey, can you help me find something?"

"Tch, like I have a choice... Fine, what are you looking for, baka?"

"Where's the electronics section?"

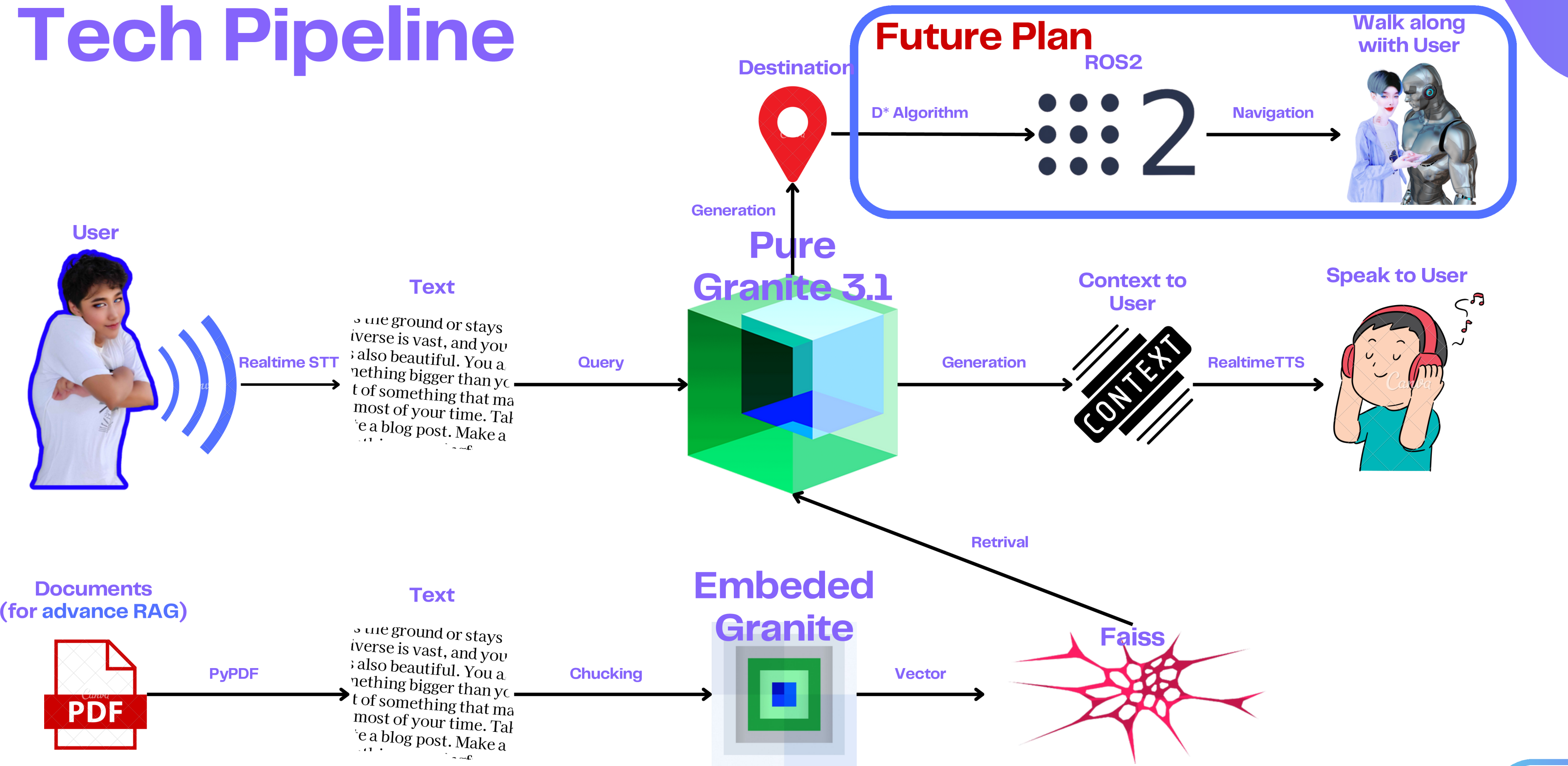"Hmph, can't even find it yourself? It's on the first floor, near the food court. Not like I care if you get lost or anything!"

Store Info Lookup

SOUND → SST — PROMPT → RAG

VOICE & TEXT

PHYSICAL ROBOT
DESTINATION COMMAND

Tech Pipeline

Future Plan

Destination

ROS2

Walk along wiith User

D* Algorithm

Navigation

Generation

Pure Granite 3.1

User

Text

's the ground or stays
iverse is vast, and you
s also beautiful. You a
nething bigger than yo
t of something that ma
most of your time. Tak
e a blog post. Make a

Realtime STT

Query

Generation

Context to User

CONTEXT

RealtimeTTS

Speak to User

Retrival

Documents (for advance RAG)

Text

's the ground or stays
iverse is vast, and you
s also beautiful. You a
nething bigger than yo
t of something that ma
most of your time. Tak
e a blog post. Make a

Embeded Granite

PyPDF

Chucking

Vector

Faiss

GRANITE - CHAN

5 Development Milestones

MVP

Voice
Interaction
with RAG

1

Output
Robot
Commands

2

Navigation
system

3

In-Store
Tablet/Kiosk

4

Robotic
Integration
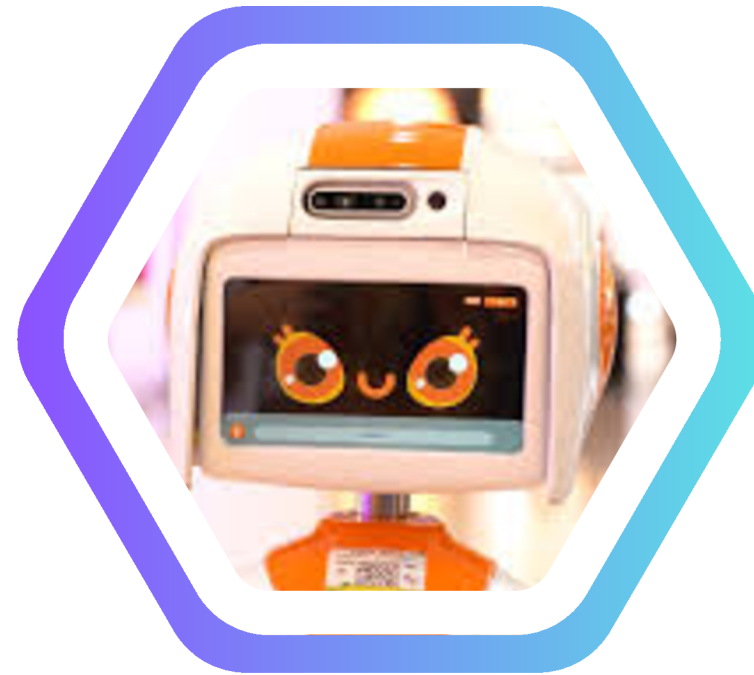
5

Future Development
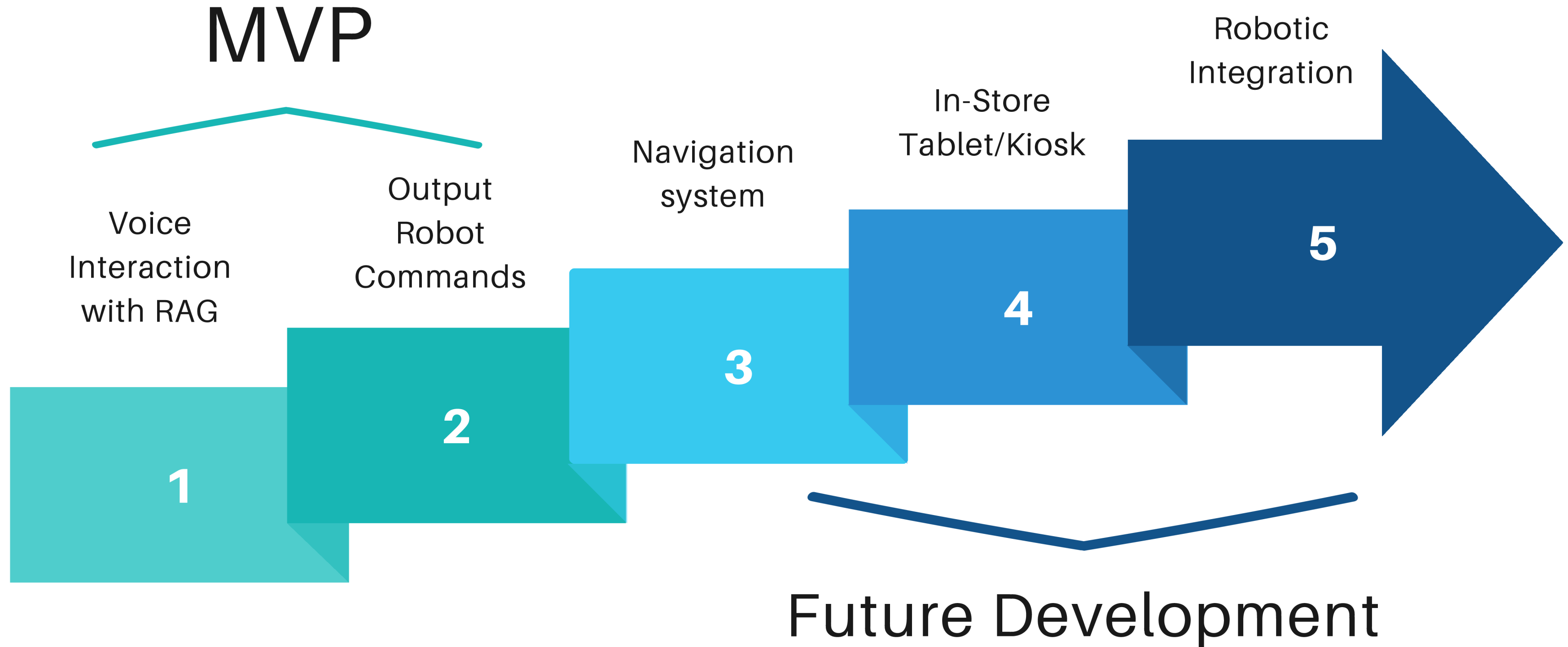
Business Plan (B2B)

AI Engagement SaaS (Tablet/Kiosk AI)

Small - Medium Business

Physical Robot

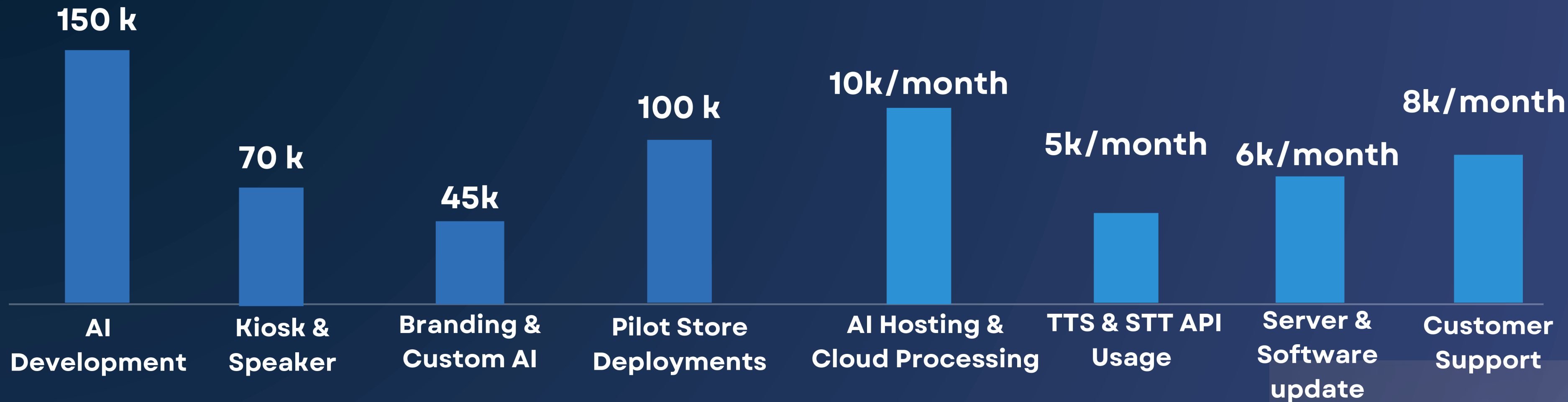Large/Commercial Business

KEY PARTNER

Granite

pepper NAO⁶ Whiz

Walmart LIDL ALDI

TARGET COSTCO WHOLESALE Kmart CUSTOMER

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Cost structure

- AI Development — 150 k
- Kiosk & Speaker — 70 k
- Branding & Custom AI — 45k
- Pilot Store Deployments — 100 k
- AI Hosting & Cloud Processing — 10k/month
- TTS & STT API Usage — 5k/month
- Server & Software update — 6k/month
- Customer Support — 8k/month

Upfront Cost (First Year Investment)

700k USD

Total 3 Years 2.1 **MILLION $**

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Revenue Stream

Subscription (B2B)

- $2,000 – $5,000 per month per store
- $10,000 setup + $1,000/month maintenance

AI Branding

- Custom AI Branding for Large Retailers
- $50,000 – $200,000 per Brand

Year 1 : 50 Stores Deployment

9 months break even

Year 1-2

Revenue Target: $4M

Year 3

Revenue Target: $15M